(1) Whether the Department should promulgate rules that would require LDCs to submit CGAC filings more frequently than semi-annually. If yes, how often should LDCs be required to submit requests for the recovery of gas supply costs.

DOER recommends the Department promulgate rules requiring LDCs to submit CGAC filings more frequently than semi-annually under certain conditions. DOER recommends these additional filings be submitted when a significant over/under recovery of an LDC's natural gas costs are expected to accumulate by the end of the designated, semi-annual season. DOER recommends an amended CGAC and GAF be filed when the LDC's projected Account 175 balances¹, including interest, if paid/collected by the LDC during the remainder of the season, will cause its GAF plus the embedded cost of gas to change by ten percent or more. DOER does not recommend additional CGAC filings and GAFs be required at other designated times of the year. DOER discusses each of these recommendations in turn.

In order for a competitive market to develop, customers purchasing a product or service must be given timely and correct price information. Such information allows customers to make the appropriate consumption decisions not only for that product or service, but also for a competitor's product or service and for all other products and services. The correct price signals enable the marketplace to work efficiently.

¹ Account 175 imbalances accrue from the under collection or over collection of an LDC's gas supply costs. For the most part, under/over collections result from the LDC's inability to accurately predict the future of natural gas prices, weather and/or customer demand over the designated semi-annual season.

The market and price for natural gas default service² in Massachusetts are no different. In order for this market to develop and mature, prices should reflect the cost of the service being provided. Given the "cost pass-through" nature of an LDC's default service, the CGAC and GAF must be timely and correct.

Accordingly, when the cost for providing default service is significantly different from the price being charged, requiring an LDC to file a CGAC with an amended GAF is essential for the natural gas market to work³. There is no need to change the CGAC and GAF if the cost for providing default service is not significantly different from the price being charged. Figure 1 (see attachment 1) compares Henry Hub prices to retail CGA prices for the period of September 2000 through May 2001. (Boston Gas was used as an illustration, but the same basic relationship can be found for all the LDCs.) Though wholesale and retail prices may not move completely in step with each other (due to storage inventories, supplemental supplies like LNG and propane, etc.), the figure shows that changes in retail rates moved in opposite directions during the past peak winter and were completely unrelated to changes in wholesale prices. Such divergence is not expected or desirable. Thus, natural gas customers were being charged at retail rates that were inconsistent with the actual costs being borne by the LDCs. More importantly, customers have no incentive to manage their demand during periods when retail gas costs differ markedly from wholesale prices (which they will eventually pay).

² "Default Service" is used throughout this document to refer to those customers that are purchasing their gas from the LDC rather than from a competitive supplier and are paying for gas service through the CGAC and transportation service through distribution changes.

³ DOER recognizes the cost of an LDC's natural gas supply changes from day to day. However, having a daily price for default service is not practical, may be confusing to customers and is and administrative and regulatory burden.

In Order D.T.E 01-09 through 01–18 (page 4), the Department reported that natural gas prices remained relatively stable from 1985 through 1999, ranging mostly within a \$0.50 per MMBtu interval. Based on this report, it appears natural gas prices have not changed significantly for the better part of 15 years. If such price stability returns in the future, an LDC's seasonal CGAC and GAF should reflect the cost of the gas supplied. In such instance, the Department need not require LDCs to make CGAC filings more than on a semi-annual basis.⁴

Likewise, if the other CGAC factors used to derive an LDC's GAF—weather and customer demand—are relatively normal and an LDC can estimate them with some accuracy, then the LDC's price should collect its gas costs on a timely basis (i.e., as incurred). Accordingly, the Department should not require LDCs to make CGAC and amended GAF filings in this instance either.

However, in D.T.E. 01-09 through 01-18, the Department also reported natural gas prices rose dramatically, suddenly, and unexpectedly during this past winter. The Department further reported the weather and the demand for natural gas were unexpected as well. These conditions created a dramatic disparity between costs and the rates that were in effect during the initial period of the winter heating season, leading the LDCs to carry extremely large deferrals that are still being recovered today.

⁴ Requiring an LDC to submit a monthly CGAC filing an GAF in the face of stable market prices would be inefficient.

Large outstanding gas cost balances lead to inefficiencies in the market in a variety of ways. First, they hide the real cost of the gas being sold. Customers do not receive the correct price signals to make well-informed consumption decisions.

Second, large gas cost imbalances force either an LDC or its customers to alter consumption patterns while the other party is forced to pay interest on an unwanted "loan" through deferral balances. If imbalances get completely out of hand as happened this past winter, then an LDC may have to borrow to its limit. Mounting deferrals may jeopardize an LDC's finances and thereby limit its ability to serve.

Third, if large under-collections of gas costs are deferred to the next comparable season by an LDC, then some default service customers may elect to migrate to alternative sources or suppliers in order to avoid paying their fair share of the gas costs incurred by the LDC to serve them. This leaves the remaining, more-captive customers to pay the difference.

Last, large gas cost balances deferred by an LDC to the next designated season subsidize current customers at the expense of future customers⁵. DOER believes such subsidies are unfair and inequitable.

Accordingly, DOER recommends an LDC's CGAC and GAF be amended within the designated season if it continues to perpetuate and increase gas cost imbalances. An

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⁵ In the case of large over collections by the LDC, the situations mentioned above are reversed: default service customers may be forced to borrow to their limit; certain customers may migrate back to default service to get the price discount; an future customers will subsidize current customers.

amended CGAC filing and GAF will ameliorate the improper conditions mentioned, above, and will allow the natural gas market in Massachusetts to develop more efficiently. More specifically, DOER recommends the Department require an LDC to file a CGAC and amended GAF for the remainder of the designated season when its projected seasonal gas cost imbalance (Account 175), including interest, increases to a level where an amended base reconciliation (Rb) and/or supplemental reconciliation adjustment (Rs) alters the base GAF and/or supplemental GAF plus the per unit embedded gas cost (B) by 10 percent or more.⁶

⁶ This was the benchmark used by the Legislature for interim reports filed by the electric industry for adjusting fuel costs. See M.G.L., c.164, sec. 94G(b).

(2) Whether, under the current regulations, LDCs can petition the Department to allow for an adjustment to the GAF more frequently than on a semi-annual basis.

DOER believes the current regulations do not provide a mechanism for LDCs to petition the Department to allow for an adjustment to the GAF more frequently than on a semiannual basis. This was not an oversight, nor was it an unintended omission. Rather, the regulations were designed to ensure that cost recovery did not challenge rate continuity and that, "rate structure changes should be made in a predictable and gradual manner which allows consumers reasonable time to adjust their consumption patterns in response to a change in structure." Cambridge Electric Light Company, D.P.U. 87-221-A (1988). While 220 CMR 6.12(2) provides for the filing of an amended GAF at any time, there is no analogous provision for adjustments to the GAF.

The semi-annual development and submission of GAF filings is inexorably tied to the calculation of rates for firm gas sales⁷. 220 CMR 6.06 provides that GAFs shall be computed on a semi-annual basis and 220 CMR 6.11 directs that GAF filings shall be submitted on a semi-annual basis.

While it could be argued that nothing in the regulations specifically precludes filing an adjustment to the GAF more frequently than semi-annually, such an interpretation would

⁷ 220 CMR 6.01 provides, in relevant part, that the purpose of 220 CMR 6.00 is to establish a procedure

that allows gas companies to adjust, on a semi-annual basis, their rates for firm gas sales in order to recover costs of firm sendout gas and to reflect the seasonal variation in the cost of gas.

be open to question. Had the Department wished to provide such a mechanism, which could work against rate continuity without specific conditions and limitations, it would have done so. In light of recent, unprecedented events in the gas market, DOER recommends that the Department amend the current regulations to provide for more frequent filings, under specific conditions.

(3) Whether, under the current regulations, the Department, on its own motion, may require LDCs to file for the recovery of gas costs more frequently than on a semi-annual basis.

DOER believes that, under the current regulations, the Department on its own motion, may require LDCs to file for the recovery of gas costs more frequently than on a semi-annual basis. 220 CMR 6.02 provides that the CGAC may be modified by the Department⁸. 220 CMR 6.12(4) provides that the operation of the CGAC is subject to all powers of suspension and investigation vested in the Department by M.G.L. c. 164.

M.G.L. c. 164 § 94 authorizes the Department to prescribe schedules showing all rates, prices and charges proposed to be collected for the sale and distribution of gas. This authority has been construed very broadly, the Supreme Judicial Court having said that, "the department has broad authority to determine ratemaking matters in the public interest." Massachusetts Institute of Technology vs. Department of Public Utilities; 425 Mass. 856, 858 (1997).

Consequently, the Department can fairly interpret 220 CMR 6.00 to provide that the Department, on its own motion, may require LDCs to file for the recovery of gas costs. Nevertheless, DOER also recommends the Department use this inquiry to investigate the benefits and costs to be derived from LDCs implementing price risk management ("PRM") during the upcoming heating season.

⁸ See <u>Fitchburg Gas and Electric Light Company</u>, D.T.E. 98-51 (September 15, 1999), citing 220 CMR 6.12.

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(4) Please comment on other points related to the CGAC regulations.

Overall, DOER believes the amended LDC CGAC and GAF filings of the past winter were problematic. They were of an extreme nature and, more importantly, were untimely. Figure 2 (attachment 2), shows monthly wholesale gas prices from October 1998 to May 2001. As shown by the figure, only last winter did wholesale gas prices become extremely high and volatile compared to previous years. Though there has been some moderation in prices since last winter, prices for future delivery remain high (recent NYMEX futures prices at Henry Hub average about \$4.00 per mmbtu over the next three years compared to \$2.67 for the same period before last winter). More importantly, last winter's price increases could not be effectively addressed in advance by the LDCs. Consequently, default service customers faced both extreme price volatility and lacked price signals that would encourage them to manage their usage in an economically efficient manner. Today, these default service customers are still paying for last winter's price hikes in natural gas because LDC gas cost imbalances are included in the off-peak period CGAC and GAF. DOER believes its recommendations, in response to Questions 1-3 above, if implemented, will help develop the natural gas market in Massachusetts, control the need and frequency of future filings, provide for timely prices and limit interseasonal subsidies and cost shifting between customers.

DOER also recommends the Department use this inquiry to investigate the benefits and costs to be derived from LDCs implementing PRM during the upcoming heating season. PRM has been extensively used in the purchase of petroleum products and by some LDCs outside of Massachusetts to reduce financial exposure associated with volatile prices. PRM does not remove the underlying volatility; rather, it controls price changes and provides a level of certainty in price changes. This certainty is crucial not only for planning and budgeting by all types of consumers; it also provides signals to the competitive market by providing a more timely benchmark price for competitive gas suppliers.

For the past several years, DOER has supported the continued efforts of the DTE and stakeholders within the natural gas industry to form a competitive retail market. DOER has promoted competition from the well head to the city gate and from the city gate to the burner tip. DOER believes competition creates better products, better services and lower prices for consumers. DOER continues to support such efforts that will help make competitive retail options available to all classes of customers.

In the past few years, competition within natural gas industry has been reasonably active, at least for the industry's largest customers. The majority of these large customers have migrated to the LDC's firm transportation service, purchasing a marketer's competitive gas supply rather than the LDC's bundled default service. This migration indicates competition can and will continue to generate significant benefits to certain customers.

However, not all customers have reaped the benefits of competition in the unbundled era. Small commercial and residential natural gas customers have not migrated. In fact, those small customers who tried firm transportation and a competitive marketer's supply have migrated back to the LDC's default service⁹. It appears competition for these customers has not been very active. Clearly, there will be an extended transition period for these customers to migrate to a more competitive environment.

Price Risk Management and Hedging

In light of what happened last winter to default service prices and because the transition period for small natural gas customers will take some time, DOER believes default service customers may benefit by being better protected from price volatility during the transition. Allowing LDCs to implement PRM programs and use hedging tools may be critical to limiting unexpected price changes for default customers in the future. Effective management of gas supply price risk can limit price swings to those customers who have not yet been able to obtain the benefits of market competition and can also hedge LDCs against unexpected price swings as occurred last winter. A certain degree of price movement in default service may be helpful in developing a competitive market (one example is the monthly electric default service pricing that is known up to six months in advance). However, extreme and unforeseen volatility, combined with a lack of competitive alternatives for certain customers, may impose higher costs on those customers yet do little or nothing to expand competitive offerings.

⁹ For example, the number of small commercial and residential customers in the Bay State Gas Company service territory choosing firm transportation and a marketer's gas supply has decreased from over 20,000 to less than 7,500. Currently, there are less than 500 residential customers (of about 250,000 total residential customers) in the Bay State service territory who continue to opt for a competitor's supply service.

The primary problem with the increases in LDC CGACs last winter was not their reflection of the drastic increases in natural gas commodity prices, or the higher demand for natural gas, as a result of cold weather. The problem was that the LDCs had few means to address these unexpected impacts when GCA rates were first proposed and approved. Unexpected cold temperatures, unexpected increases in gas commodity costs and unexpected additional demand for natural gas led to the LDCs' huge underrecoveries of gas costs. These unexpected and unmanageable under-recoveries led to the Department's unusual action. PRM can help avoid the negative consequences of unexpected events.

An LDC's CGAC and GAF are derived from forecasted supply costs, weather and customer demand at the time of filing with the Department. Such forecasts are based on the expected future cost of gas, expected temperatures and expected demand for natural gas. If seasonal weather and fuel supply use are as expected, then an LDC should recover its actual supply costs as they are incurred. If the season is significantly different or unexpected, then large over/under recoveries of gas costs may occur.

As noted in DOER's response to Question 1, above, large imbalances in gas costs can lead to inefficient and unfair conditions and can stifle the development of the market. DOER has proposed to minimize such conditions by recommending an LDC be required to file an amended CGAC and GAF when its gas cost imbalance becomes large enough to significantly change its GAF for the remainder of the designated season.

Amended CGAC filings and timely GAFs will limit an LDC's gas cost imbalance but will not limit price volatility to default service customers. Wholesale prices for natural gas supplies will move as the market moves. Retail prices to default service customers will move in the same direction. If wholesale prices become volatile, as happened this past winter, then natural gas customers could face difficult situations once again. Another option that may help to address these problems is to allow LDCs to use PRM to protect their default service customers from large unexpected changes in wholesale prices 10. Additionally, PRM tools can reduce extraordinary price fluctuations because prices will be capped or will flow within a specific range. As such, LDC over/under recoveries are necessarily reduced resulting in lower interest payments/expenses. In periods of LDC under recovery, interest charged to customers is lowered. Interest paid to customers is lowered during periods of over recovery.

Today, all LDCs use <u>physical</u> PRM tools. For example, buying a supply to fill upstream underground and on-system storage capacity during the off-peak season is a physical price hedge for an LDC's winter gas supply. It allows the LDC to purchase gas in the off-peak season (usually at low prices) but use it during the peak season (when prices are usually high). In the past, this physical management of price risk appears to have worked well for the LDCs and their default service customers. These practices have limited price volatility to some degree.

¹⁰ Volatile natural gas prices can create a significant hurdle to the Department's goal of rate continuity. In D.T.E. 01-09 through −18, the Department relied specifically on this ratemaking goal as the reason for limiting the increases in the LDC's GAFs this past winter. Therefore, attempts by LDCs to keep natural gas rates relatively stable through the use of PRM and hedging tools are good from a customer, regulatory and market development perspective.

However, while a few fixed-price supply contracts have been purchased by the Massachusetts LDCs, the use of <u>financial</u> PRM tools, like call options and collars, have been virtually nonexistent. Outside of Massachusetts many LDCs employ financial PRM tools ¹¹. Several state Public Utility Commissions are investigating the benefits and costs of LDC PRM programs, including Arizona, Kentucky, New Jersey, Nevada and Michigan. Financial PRM tools control extraordinary price fluctuations in natural gas supplies because they set price ceilings and price ranges. These hedging tools can limit unexpected price changes to default service customers and can lower an LDC's under/over collections of gas costs¹². These outcomes are beneficial and promote the Department's rate-making goals.

In addition when the price of gas commodity is beyond either the Department's or the LDC's control and is subject to national and international forces, then hedging or laying off a portion of that price risk to an entity willing to take on that risk may be a good business practice. Certainly, hedging gas supplies protects customers (and the LDC) from drastic price changes.

While, PRM can provide benefits, we also acknowledge that there is a potential downside. Like any insurance policy, we may pay a premium for insurance that does not turn out to be needed. During periods of low and stable prices (such was the case until last year) the benefits of PRM become much more questionable. The first issue that must

¹¹ A cross-section of LDCs using such tools include New Jersey Natural Gas Company, Kansas Gas Service Company, Public Service of Colorado, Greeley United Cities Company and Energy North Company.

¹² For example, as reported in <u>Crain's Chicago Business</u> (1/8/01), PRM could have reduced the average gas bill for residential customers in Illinois to \$173 from a projected \$346.

be considered is the cost of purchasing the particular PRM instruments. This cost will vary depending on the instruments chosen (options, futures, collars, swaps, etc.). In addition, there is the potential for falling prices and thereby exposure to losses compared to a non-PRM position. As with cost, the extent of exposure can vary with the selection of the particular instrument ¹³. Finally, there are administrative costs of PRM incurred by the LDC or the party that is administering the PRM effort on behalf of the LDC that need to be considered. All of these costs and potential risks need to be fully examined before a PRM strategy is approved.

Notwithstanding the difficulties of determining "prudent" use of these tools, DOER recommends the Department investigate in this proceeding the benefits and costs of LDCs implementing both physical and financial PRM programs for purchasing their gas supplies.¹⁴

¹³ Options, for example gives the purchase right, but not the obligation, to buy or sell a commodity at a particular price (knows as the strike price). Unlike forward or futures contracts that obligate the buyers and sellers, opinions only obligate the seller.

¹⁴ The use of PRM tools by LDCs may not reduce the cost of an LDC's gas supply due to the cost of purchasing the hedge. However, they can reduce unexpected price volatility.

Some of the more basic questions that need to be answered in such an investigation include the following:

- 1) What are the costs and benefits of PRM programs?
- 2) What types of PRM tools exist?
- 3) What type of risk is captured in the PRM tool?
- 4) Should all PRM tools be eligible for purchase?
- 5) What are the costs of each PRM tool?
- 6) Should PRM costs be capped?
- 7) Should PRM costs be collected from customers?
- 8) Should resulting savings be shared?
- 9) Should PRM programs be mandatory?
- 10) Should a certain percentage of supply be financially hedged?
- 11) Should all customer classes be eligible to participate?
- 12) What regulatory and accounting rules and guidelines should be implemented?
- 13) How does the use of PRM tools affect the CGAC?
- 14) Should PRM programs be company-specific or generic?
- 15) What will be the near-term effects on the development of a more competitive market from LDCs implementing PRM programs?

DOER continues to believe that the long-term policy goal for the natural gas market in Massachusetts should be full and fair retail competition. In the near-term, however, it appears the market has entered a period of unpredictable gas commodity prices. This, combined with the fact that most customers are unlikely to have competitive options available to them for at least the coming heating season, leads DOER to believe the Department should investigate the benefits and costs of LDC PRM programs.

Figure 1

A Comparison of Wholesale and Retail Gas Prices
From September 2000 Through May 2001

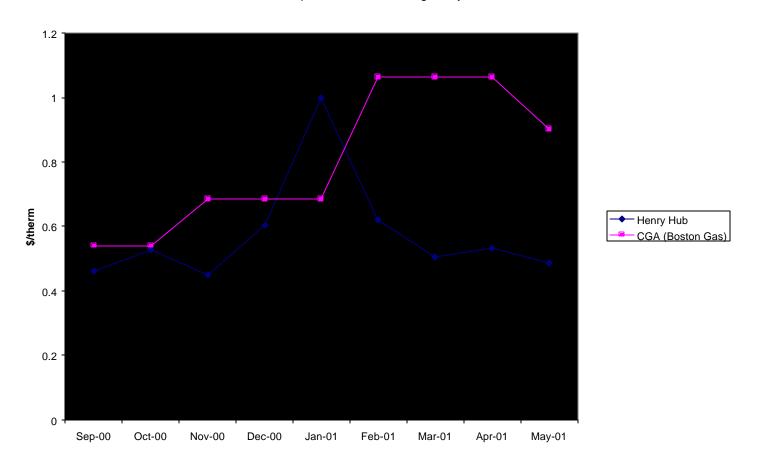
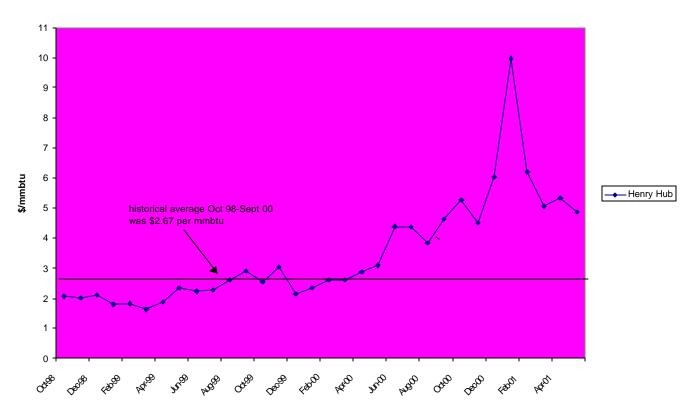


Figure 2

Henry Hub Wholesale Gas Prices October 1998 -- May 2001



Source: Gas Daily